

Project Leader



Contact

Amélie FONTCUBERTA

☎ +33 4 67 67 02 84
@ amelie.fontcuberta
@ecocean.fr

Partners

- Université de Perpignan CEFREM, Le Barcarès.
- Ifremer, Station océanographique de la Seyne sur Mer
- Station de recherches sous-marines et océanographiques de Calvi (STARESO), Corse
- Andromède Océanologie, Montpellier



Project location

Mediterranean coast

Duration

6 years (2014-2020)

Funders

Rhone Mediterranean Water Agency



Website

www.ecocean.fr
www.medtrix.fr

➤ **Context**

The aim of the European Union's ambitious Marine Strategy Framework Directive is to protect more effectively the marine environment across Europe and achieve Good Environmental Status (GES) of the EU's marine waters by 2020. This strategy is applied at the French national level through an Action Plan for the Marine Environment (Article L 219-9), which consists of the implementation of research projects to improve knowledge and develop solutions that reduce the ecological footprint of human coastal infrastructures. These actions match with the objectives of the Rhone Mediterranean and Corsica French Water Agency (AERMC), especially on marine ecosystems surveillance and identification of human-based pressures affecting them. The implementation of the RESPIRE project taking place along Mediterranean coastal infrastructures will contribute to these efforts.

➤ **Interests & objectives**

The RESPIRE network is a complementary surveillance network to those that already exist (like REPHY for Phytoplankton or REBENT for benthic fauna and flora survey). Initiated by the AERMC, the new network will consolidate the local strategies as well as the national objectives of public policies responsible for marine environment.

The short term objectives of the project is to monitor spatial and temporal fish recruitment on the Mediterranean coast inside 23 marinas located between Port-Vendres and Monaco as well as on the Corsica Island. Diversity and abundance of young-of-the-year species will be monitored. The medium term objective aims to ascertain and measure the nursery role provided by marinas' calm waters.

➤ **R&D works**

In this project, ECOCEAN offers the use of Biohut®, an artificial fish habitat that aims to bring back the nursery function in marinas. Tested during previous research programs (for instance NAPPEX & GIREL), the Biohut® correspond to a suitable area to monitor fish recruitment in marinas habitats due to their capacity to provide young-of-the-year fish a shelter and a source of nutrient adapted to their metabolism.

➤ **Future Prospects:**

In this project, the installation of Biohut® doesn't aim to restore the nursery functions in ports. The module will serve as an observation unit for scientific monitoring given its ability to house and protect the young recruits in this environment.. The results on abundance and fish species diversity observed will help to measure the condition and health of fish recruitment along the Mediterranean coast.

The main issue identified by the AERMC being the « critical decrease of biodiversity due to the damage of shallow coastal waters », the RESPIRE network will provide to decision makers and scientists a new tool to assess habitats quality and health condition in marinas regarding biodiversity and fish recruitment.

